Edited by
Harold J.
Leavitt,
Louis R.
Pondy,
and
David M.
Boje

Readings in Managerial Psychology

Third Edition

HAROLD J. LEAVITT is now the Walter Kilpatrick
Professor of Organizational Behavior and Psychology in
the Graduate School of Business, Stanford University.
He is the author of *Managerial Psychology*, 3d ed.
(University of Chicago Press, 1972), editor of *The
Social Science of Organizations,* and coeditor of *New
Perspectives in Organizational Research.*

LOUIS R. PONDY, currently professor of business admin-
istration at the University of Illinois (Urbana), has also
taught at Duke University and at the University of
Pittsburgh. He has been involved as a researcher and as a
consultant to the federal government on health systems
and health manpower problems. He is on the editorial
board of the *Administrative Science Quarterly,* and has
contributed numerous articles to scholarly publications.

DAVID M. BOJE is currently an assistant professor of
Behavioral and Organizational Sciences in the
Graduate School of Management, University of
California, Los Angeles. He is also coeditor of
Managing II, 2d ed., and is now involved in research,
consulting, and publishing in the areas of inter-
organizational systems, intraorganizational cultures,
and qualitative methodologies.

Contents

The second paper, by Staw, is a more contemporary piece, dealing with a motivational problem that has important implications for the managing process. The issue is intrinsic vs. extrinsic motivation. Some behavioral people like to say (with good reason) that one should not ask the question "How do I motivate people?" You cannot motivate people, only God can motivate. The more proper question would be something like: "What are the conditions under which people's intrinsic God-given motivation can be nurtured to grow and bloom?" By that view, motivation is an *intrinsic* phenomonon, bubbling up out of the human soul. But of course we all know that to some degree we can get more work out of people if we pay them more, or if we offer them other *extrinsic* incentives. Staw reviews what is known about those two interacting aspects of motivation, for they are interactive— and not always harmonious. Sometimes, for example, when we add extrinsic motivation we kill intrinsic motivation. If I paid you to do something you now do for fun, would the two motivating forces simply sum? Or would they conflict?

We move then to a third great contributor in our understanding of motivation, David McClelland. McClelland has for many years been concerned with cross-cultural as well as individual differences in motivation. In the paper included here, a recent one, McClelland shows his growing conviction that power, more than motives like achievement or affiliation, is most closely related to managerial success. But he divides power into two types, so that the reader who is turned off by a term like "power motivation" should hold his fire until after he has examined that article.

Finally, the paper by Hackman et al. takes us into some applications of motivational theory in managerial practice. It looks at the new popular notion of job enrichment as a mechanism for generating greater motivational energy at work. While theories of motivation differ widely, the job enrichment idea, providing wider variety and greater control, fits almost all theoretical perspectives as a sensible route to providing room on the job for human motivation to evolve.

So the papers in this chapter move from theory to practice, and this pattern will be observed in several of the chapters that follow. We have not, of course, either covered all major theories of motivation or all major practices that have been extrapolated from them. But these four papers are relevant and we believe useful for the manager and the student of management.

A Theory of Human Motivation
A. H. Maslow

Dynamics of the basic needs

The "physiological" needs

The needs that are usually taken as the starting point for motivation theory are the so-called physiological drives. Two recent lines of research make it necessary to revise our customary notions about these needs: first, the development of the concept of homeostasis, and second, the finding that appetites (preferential choices among foods) are a fairly efficient indication of actual needs or lacks in the body.

Homeostasis refers to the body's automatic efforts to maintain a constant, normal state of the blood stream. Cannon[1] has described this process for (1) the water content of the blood, (2) salt content, (3) sugar content, (4) protein content, (5) fat content, (6) calcium content, (7) oxygen content, (8) constant hydrogen-ion level (acid-base balance), and (9) constant temperature of the blood. Obviously this list can be extended to include other minerals, the hormones, vitamins, and so on.

Young in a recent article[2] has summarized the work on appetite in its relation to body needs. If the body lacks some chemical, the individual will tend to develop a specific appetite or partial hunger for that food element.

Thus it seems impossible as well as useless to make any list of fundamental physiological needs for they can come to almost any number one might wish, depending on the degree of specificity of description.

1. W. B. Cannon, *Wisdom of the Body* (New York: Norton, 1932).
2. P. T. Young, "The Experimental Analysis of Appetite," *Psychological Bulletin* 38 (1941): 129–64.

We cannot identify all physiological needs as homeostatic. That sexual desire, sleepiness, sheer activity, and maternal behavior in animals are homeostatic has not yet been demonstrated. Furthermore, this list would not include the various sensory pleasures (tastes, smells, tickling, stroking) which are probably physiological and which may become the goals of motivated behavior.

In a previous paper[3] it has been pointed out that these physiological drives or needs are to be considered unusual rather than typical because they are isolable and because they are localized somatically. That is to say, they are relatively independent of each other, of other motivations, and of the organism as a whole, and, in many cases, it is possible to demonstrate a localized, underlying somatic base for the drive. This is true less generally than has been thought (exceptions are fatigue, sleepiness, maternal responses), but it is still true in the classic instances of hunger, sex, and thrist.

It should be pointed out again that any of the physiological needs and the consummatory behavior involved with them serve as channels for all sorts of other needs as well. The person who thinks he is hungry may actually be seeking more for comfort or dependence than for vitamins or proteins. Conversely, it is possible to satisfy the hunger need in part by other activities such as drinking water or smoking cigarettes. In other words, these physiological needs are only relatively isloable.

Undoubtedly these physiological needs are the most prepotent of all needs. What this means specifically is that, in the human being who is missing everything in life in an extreme fashion, it is most likely that the major motivation would be the physiological needs rather than any others. A person who is lacking food, safety, love, and esteem would most probably hunger for food more strongly than for anything else.

If all the needs are unsatisfied, and the organism is then dominated by the physiological needs, all other needs may become simply nonexistent or be pushed into the background. It is then fair to characterize the whole organism by saying that it is hungry, for consciousness is almost completely preempted by hunger. All capacities are put into the service of hunger-satisfaction, and the organization of these capacities is almost entirely determined by the one purpose of satisfying hunger. The receptors and effectors, the intelligence, memory, habits, all may now be defined simply as hunger-gratifying tools. Capacities that are not useful for this purpose lie dormant or are pushed into the

3. A. H. Maslow, "A Preface of Motivation Theory," *Psychosomatic Medicine* 5 (1943): 85–92.

background. The urge to write poetry, the desire to acquire an automobile, the interest in American history, the desire for a new pair of shoes are, in the extreme case, forgotten or become of secondary importance. For the man who is extremely and dangerously hungry, no other interests exist but food. He dreams food, he remembers food, he thinks about food, he emotes only about food, he perceives only food, and he wants only food. The more subtle determinants that ordinarily fuse with the physiological drives in organizing even feeding, drinking, or sexual behavior, may now be so completely overwhelmed as to allow us to speak at this time (but *only* at this time) of pure hunger drive and behavior, with the one unqualified aim of relief.

Another peculiar characteristic of the human organism when it is dominated by a certain need is that the whole philosophy of the future tends also to change. For our chronically and extremely hungry man, utopia can be defined very simply as a place where there is plenty of food. He tends to think that, if only he is guaranteed food for the rest of his life, he will be perfectly happy and will never want anything more. Life itself tends to be defined in terms of eating. Anything else will be defined as unimportant. Freedom, love, community feeling, respect, philosophy may all be waved aside as fripperies which are useless, since they fail to fill the stomach. Such a man may fairly be said to live by bread alone.

It cannot possibly be denied that such things are true, but their *generality* can be denied. Emergency conditions are, almost by definition, rare in the normally functioning peaceful society. That this truism can be forgotten is due mainly to two reasons. First, rats have few motivations other than physiological ones, and since so much of the research on motivation has been made with these animals, it is easy to carry the rat-picture over to the human being. Second, it is too often not realized that culture itself is an adaptive tool, one of whose main functions is to make the physiological emergencies come less and less often. In most of the known societies, chronic extreme hunger of the emergency type is rare rather than common. In any case, this is still true in the United States. The average American citizen is experiencing appetite rather than hunger when he says, "I am hungry." He is apt to experience sheer life-and-death hunger only by accident and then only a few times through his entire life.

Obviously a good way to obscure the "higher" motivations, and to get a lopsided view of human capacities and human nature, is to make the organism extremely and chronically hungry or thirsty. Anyone who attempts to make an emergency picture into a typical one and who will measure all of man's goals and desires by his behavior during extreme physiological deprivation is certainly being blind to many things. It is

quite true that man lives by bread alone—when there is no bread. But what happens to man's desires when there *is* plenty of bread and when his belly is chronically filled?

At once other (and "higher") needs emerge and these, rather than physiological hungers, dominate the organism. And when these in turn are satisfied, again new (and still "higher") needs emerge, and so on. This is what we mean by saying that the basic human needs are organized into a hierarchy of relative prepotency.

One main implication of this phrasing is that gratification becomes as important a concept as deprivation in motivation theory, for it releases the organism from the domination of a relatively more physiological need, permitting thereby the emergence of other more social goals. The physiological needs, along with their partial goals, when chronically gratified cease to exist as active determinants or organizers of behavior. They now exist only in a potential fashion in the sense that they may emerge again to dominate the organism if they are thwarted. But a want that is satisfied is no longer a want. The organism is dominated and its behavior organized only by unsatisfied needs. If hunger is satisfied, it becomes unimportant in the current dynamics of the individual.

This statement is somewhat qualified by a hypothesis to be discussed more fully later, namely, that it is precisely those individuals in whom a certain need has always been satisfied who are best equipped to tolerate deprivation of that need in the future; furthermore, those who have been deprived in the past will react to current satisfactions differently from the one who has never been deprived.

The safety needs

If the physiological needs are relatively well gratified, there then emerges a new set of needs, which we may categorize roughly as the safety needs. All that has been said of the physiological needs is equally true, although in lesser degree, of these desires. The organism may equally well be wholly dominated by them. They may serve as the almost exclusive organizers of behavior, recruiting all the capacities of the organism in their service, and we may then fairly describe the whole organism as a safety-seeking mechanism. Again we may say of the receptors, the effectors, of the intellect and the other capacities that they are primarily safety-seeking tools. Again, as in the hungry man, we find that the dominating goal is a strong determinant not only of his current world-outlook and philosophy but also of his philosophy of the future. Practically everything looks less important than safety (even sometimes the physiological needs which, being satisfied, are now underestimated). A man, in this state, if it is extreme enough and chronic enough, may be characterized as living almost for safety alone.

Although in this paper we are interested primarily in the needs of the adult, we can approach an understanding of his safety needs perhaps more efficiently by observation of infants and children, in whom these needs are much more simple and obvious. One reason for the clearer appearance of the threat or danger reaction in infants is that they do not inhibit this reaction at all, whereas adults in our society have been taught to inhibit it at all costs. Thus even when adults do feel their safety to be threatened, we may not be able to see this on the surface. Infants will react in a total fashion and as if they were endangered, if they are disturbed or dropped suddenly, startled by loud noises, flashing light, or other unusual sensory stimulation, by rough handling, by general loss of support in the mother's arms, or by inadequate support.[4]

In infants we can also see a much more direct reaction to bodily illnesses of various kinds. Sometimes these illnesses seem to be immediately and per se threatening and seem to make the child feel unsafe. For instance, vomiting, colic, or other sharp pains seem to make the child look at the whole world in a different way. At such a moment of pain, it may be postulated that, for the child, the appearance of the whole world suddenly changes from sunniness to darkness, so to speak, and becomes a place in which anything at all might happen, in which previously stable things have suddenly become unstable. Thus a child who because of some bad food is taken ill may, for a day or two, develop fear, nightmares, and a need for protection and reassurance never seen in him before his illness.

Another indication of the child's need for safety is his preference for some kind of undisrupted routine or rhythm. He seems to want a predictable, orderly world. For instance, injustice, unfairness, or inconsistency in the parents seems to make a child feel anxious and unsafe. This attitude may be not so much because of the injustice per se or any particular pains involved, but rather because this treatment threatens to make the world look unreliable or unsafe or unpredictable. Young children seem to thrive better under a system which has at least a skeletal outline of rigidity, in which there is a schedule of a kind, some sort of routine, something that can be counted upon, not only for the present, but also far into the future. Perhaps one could express this more accurately by saying that the child needs an organized world rather than an unorganized or unstructured one.

The central role of the parents and the normal family setup are in-

4. As the child grows up, sheer knowledge and familiarity as well as better motor development make these "dangers" less and less dangerous and more and more manageable. Throughout life it may be said that one of the main conative functions of education is this neutralizing of apparent dangers through knowledge, e.g., I am not afraid of thunder because I know something about it.

disputable. Quarreling, physical assault, separation, divorce, or death within the family may be particularly terrifying. Also parental outbursts of rage or threats of punishment directed to the child, calling him names, speaking to him harshly, shaking him, handling him roughly, or actual physical punishment sometimes elicit such total panic and terror in the child that we must assume more is involved than the physical pain alone. While it is true that in some children this terror may represent also a fear of loss of parental love, it can also occur in completely rejected children, who seem to cling to the hating parents more for sheer safety and protection than because of hope of love.

Confronting the average child with new, unfamiliar, strange, unmanageable stimuli or situations will too frequently elicit the danger or terror reaction, as, for example, getting lost or even being separated from the parents for a short time, being confronted with new faces, new situations, or new tasks, the sight of strange, unfamiliar, or uncontrollable objects, illness, or death. Particularly at such times, the child's frantic clinging to his parents is eloquent testimony to their role as protectors (quite apart from their roles as food-givers and love-givers).

From these and similar observations, we may generalize and say that the average child in our society usually prefers a safe, orderly, predictable, organized world which he can count on and in which unexpected, unmanageable, or other dangerous things do not happen and in which, in any case, he has all-powerful parents who protect and shield him from harm.

That these reactions may so easily be observed in children is in a way a proof of the fact that children in our society feel too unsafe (or, in a world, are badly brought up). Children who are reared in an unthreatening, loving family do *not* ordinarily react as we have described above.[5] In such children the danger reactions are apt to come mostly to objects or situations that adults too would consider dangerous.[6]

The healthy, normal, fortunate adult in our culture is largely satis-

5. M. Shirley, "Children's Adjustments to a Strange Situation," *Journal of Abnormal and Social Psychology* 37 (1942): 201–17.
6. A "test battery" for safety might be confronting the child with a small exploding firecracker or with a bewhiskered face, having the mother leave the room, putting him upon a high ladder, giving him a hypodermic injection, having a mouse crawl up to him, and so on. Of course I cannot seriously recommend the deliberate use of such "tests," for they might very well harm the child being tested. But these and similar situations come up by the score in the child's ordinary day-to-day living and may be observed. There is no reason why these stimuli should not be used with, for example, young chimpanzees.

fied in his safety needs. The peaceful, smoothly running, "good" society ordinarily makes its members feel safe enough from wild animals, extremes of temperature, criminals, assault and murder, tyranny, and so on. Therefore, in a very real sense, they no longer have any safety needs as active motivators. Just as a sated man no longer feels hungry, a safe man no longer feels endangered. If we wish to see these needs directly and clearly we must turn to neurotic or near-neurotic individuals, and to the economic and social underdogs. In between these extremes, we can perceive the expressions of safety needs only in such phenomena as, for instance, the common preference for a job with tenure and protection, the desire for a savings account, and for insurance of various kinds (medical, dental, unemployment, disability, old age).

Other broader aspects of the attempt to seek safety and stability in the world are seen in the very common preference for familiar rather than unfamiliar things, or for the known rather than the unknown. The tendency to have some religion or world-philosophy that organizes the universe and the men in it into some sort of satisfactorily coherent, meaningful whole is also in part motivated by safety-seeking. Here too we may list science and philosophy in general as partially motivated by the safety needs (we shall see later that there are also other motivations to scientific, philosophical, or religious endeavor).

Otherwise the need for safety is seen as an active and dominant mobilizer of the organism's resources only in emergencies, e.g., war, disease, natural catastrophes, crime waves, societal disorganization, neurosis, brain injury, chronically bad situations.

Some neurotic adults in our society are, in many ways, like the unsafe child in their desire for safety, although in the former it takes on a somewhat special appearance. Their reaction is often to unknown, psychological dangers in a world that is perceived to be hostile, overwhelming, and threatening. Such a person behaves as if a great catastrophe were almost always impending, i.e., he is usually responding as if to an emergency. His safety needs often find specific expression in a search for a protector, or a stronger person on whom he may depend, or perhaps a *Führer*.

The neurotic individual may be described in a slightly different way with some usefulness as a grown-up person who retains his childish attitudes toward the world. That is to say, a neurotic adult may be said to behave "as if" he were actually afraid of a spanking or of his mother's disapproval or of being abandoned by his parents or of having his food taken away from him. It is as if his childish attitudes of fear and threat reaction to a dangerous world had gone underground and, untouched by the growing up and learning processes, were now

ready to be called out by any stimulus that would make a child feel
endangered and threatened.[7]

The neurosis in which the search for safety takes its clearest form is
in the compulsive-obsessive neurosis. Compulsive-obsessives try franti-
cally to order and stabilize the world so that no unmanageable, unex-
pected, or unfamiliar dangers will ever appear.[8] They hedge them-
selves about with all sorts of ceremonials, rules, and formulas so that
every possible contingency may be provided for and so that no new
contingencies may appear. They are much like the brain-injured cases,
described by Goldstein,[9] who manage to maintain their equilibrium by
avoiding everything unfamiliar and strange and by ordering their re-
stricted world in such a neat, disciplined, orderly fashion that every-
thing in the world can be counted upon. They try to arrange the world
so that anything unexpected (dangers) cannot possibly occur. If,
through no fault of their own, something unexpected does occur, they
go into a panic reaction as if this unexpected occurrence constituted a
grave danger. What we can see only as a none-too-strong preference
in the healthy person, e.g., preference for the familiar, becomes a life-
and-death necessity in abnormal cases.

The love needs

If both the physiological and the safety needs are fairly well gratified,
then there will emerge the love and affection and belongingness needs,
and the whole cycle already described will repeat itself with this new
center. Now the person will feel keenly, as never before, the absence
of friends or a sweetheart or a wife or children. He will hunger for af-
fectionate relations with people in general, namely, for a place in his
group, and he will strive with great intensity to achieve this goal. He
will want to attain such a place more than anything else in the world
and may even forget that once, when he was hungry, he sneered at love.

In our society the thwarting of these needs is the most commonly
found core in cases of maladjustment and more severe psychopathol-
ogy. Love and affection, as well as their possible expression in sexu-
ality, are generally looked upon with ambivalence and are customarily
hedged about with many restrictions and inhibitions. Practically all
theorists of psychopathology have stressed thwarting of the love needs
as basic in the picture of maladjustment. Many clinical studies have

7. Not all neurotic individuals feel unsafe. Neurosis may have at its core a
thwarting of the affection and esteem needs in a person who is generally safe.

8. A. H. Maslow and B. Mittelmann, *Principles of Abnormal Psychology*
(New York: Harper & Bros., 1941).

9. K. Goldstein, *The Organism* (New York: American Book Co., 1939).

therefore been made of this need and we know more about it perhaps
than any of the other needs except the physiological ones.[10]

One thing that must be stressed at this point is that love is not
synonymous with sex. Sex may be studied as a purely physiological
need. Ordinarily sexual behavior is multidetermined, that is to say,
determined not only by sexual but also by other needs, chief among
which are the love and affection needs. Also not to be overlooked is the
fact that the love needs involve both giving *and* receiving love.[11]

The esteem needs

All people in our society (with a few pathological exceptions) have a
need or desire for a stable, firmly based, (usually) high evaluation of
themselves, for self-respect, or self-esteem, and for the esteem of
others. By firmly based self-esteem, we mean that which is soundly
based on real capacity, achievement, and respect from others. These
needs may be classified into two subsidiary sets. These are, first, the
desire for strength, for achievement, for adequacy, for confidence in
the face of the world, and for independence and freedom.[12] Second,
we have what we may call the desire for reputation or prestige (defin-
ing it as respect or esteem from other people), recognition, attention,
importance, or appreciation.[13] These needs have been relatively
stressed by Alfred Adler and his followers, and have been relatively
neglected by Freud and the psychoanalysts. More and more today,
however, there is appearing widespread appreciation of their central
importance.

Satisfaction of the self-esteem need leads to feelings of self-confi-
dence, worth, strength, capability, and adequacy, of being useful and

10. Maslow and Mittelmann, *Principles of Abnormal Psychology*.

11. For further details see A. H. Maslow, "The Dynamics of Psychological
Security-Insecurity," *Character and Personality* 10 (1942): 331–44, and J. Plant,
Personality and the Cultural Pattern (New York: Commonwealth Fund, 1937),
chap. 5.

12. Whether or not this particular desire is universal we do not know. The
crucial question, especially important today, is, "Will men who are enslaved and
dominated inevitably feel dissatisfied and rebellious?" We may assume on the
basis of commonly known clinical data that a man who has known true freedom
(not paid for by giving up safety and security but rather built on the basis of ade-
quate safety and security) will not willingly or easily allow his freedom to be
taken away from him. But we do not know that this is true for the person born
into slavery. The events of the next decade should give us our answer. See dis-
cussion of this problem in E. Fromm, *Escape from Freedom* (New York: Farrar
& Rinehart, 1941), chap. 5.

13. Perhaps the desire for prestige and respect from others is subsidiary to
the desire for self-esteem or confidence in one's self. Observation of children
seems to indicate that this is so, but clinical data give no clear support of such a
conclusion.

necessary in the world. But thwarting of these needs produces feelings of inferiority, of weakness, and of helplessness. These feelings in turn give rise to either basic discouragement or else compensatory or neurotic trends. An appreciation of the necessity of basic self-confidence and an understanding of how helpless people are without it can be easily gained from a study of severe traumatic neurosis.[14]

The need for self-actualization

Even if all these needs are satisfied, we may still often (if not always) expect that a new discontent and restlessness will soon develop, unless the individual is doing what he is fitted for. A musician must make music, an artist must paint, a poet must write, if he is to be ultimately happy. What a man *can* be, he *must* be. This need we may call self-actualization.

This term, first coined by Kurt Goldstein, is being used in this paper in a much more specific and limited fashion. It refers to the desire for self-fulfillment, namely, to the tendency for one to become actualized in what one is potentially. This tendency might be phrased as the desire to become more and more what one is, to become everything that one is capable of becoming.

The specific form that these needs take will of course vary greatly from person to person. In one individual it may be expressed maternally, as the desire to be an ideal mother, in another athletically, in still another aesthetically, in the painting of pictures, and in another inventively, in the creation of new contrivances. It is not necessarily a creative urge, although in people who have any capabilities for creation it will take this form.

The clear emergence of these needs rests upon prior satisfaction of the physiological, safety, love, and esteem needs. We shall call people who are satisfied in these needs, basically satisfied people, and it is from these that we may expect the fullest (and healthiest) creativeness.[15] Since, in our society, basically satisfied people are the ex-

14. A. Kardiner, *The Traumatic Neuroses of War* (New York: Hoeber, 1941). For more extensive discussion of normal self-esteem, as well as for reports of various researches, see A. H. Maslow, "Dominance, Personality, and Social Behavior in Women," *Journal of Social Psychology* 10 (1939): 3–39.

15. Clearly creative behavior, like painting, is like any other behavior in having multiple determinants. It may be seen in "innately creative" people whether they are satisfied or not, happy or unhappy, hungry or sated. Also, it is clear that creative activity may be compensatory, ameliorative, or purely economic. It is my impression (as yet unconfirmed) that it is possible to distinguish the artistic and intellectual products of basically satisfied people from those of basically unsatisfied people by inspection alone. In any case, here too we must distinguish, in a dynamic fashion, the overt behavior itself from its various motivations or purposes.

ception, we do not know much about self-actualization, either experimentally or clinically. It remains a challenging problem for research.

The preconditions for the basic need satisfactons

There are certain conditions which are immediate prerequisites for the basic need satisfactions. Danger to these is reacted to almost as if it were a direct danger to the basic needs themselves. Such conditions as freedom to speak, freedom to do what one wishes so long as no harm is done to others, freedom to express one's self, freedom to investigate and seek for information, freedom to defend one's self, justice, fairness, honesty, orderliness in the group are examples of such preconditions for basic need satisfactions. Thwarting in these freedoms will be reacted to with a threat or emergency response. These conditions are not ends in themselves but they are *almost* so, since they are so closely related to the basic needs, which are apparently the only ends in themselves. These conditions are defended because without them the basic satisfactions are quite impossible, or, at least, very severely endangered.

If we remember that the cognitive capacities (perceptual, intellectual, learning) are a set of adjustive tools, which have, among other functions, that of satisfaction of our basic needs, then it is clear that any danger to them, any deprivation or blocking of their free use, must also be indirectly threatening to the basic needs themselves. Such a statement is a partial solution of the general problems of curiosity, the search for knowledge, truth, and wisdom, and the ever-persistent urge to solve the cosmic mysteries.

We must therefore introduce another hypothesis and speak of degrees of closeness to the basic needs, for we have already pointed out that *any* conscious desires (partial goals) are more or less important as they are more or less close to the basic needs. The same statement may be made for various behavior acts. An act is psychologically important if it contributes directly to satisfaction of basic needs. The less directly it contributes, or the weaker this contribution is, the less important this act must be conceived to be from the point of view of dynamic psychology. A similar statement may be made for the various defense or coping mechanisms. Some are very directly related to the protection or attainment of the basic needs, others are only weakly and distantly related. Indeed, if we wished, we could speak of more basic and less basic defense mechanisms and then affirm that danger to the more basic defenses is more threatening than danger to less basic defenses (always remembering that this is so only because of their relationship to the basic needs).

The desires to know and to understand

So far, we have mentioned the cognitive needs only in passing. Acquiring knowledge and systematizing the universe have been considered as, in part, techniques for the achievement of basic safety in the world, or, for the intelligent man, expressions of self-actualization. Also freedom of inquiry and expression have been discussed as preconditions of satisfactions of the basic needs. True though these formulations may be, they do not constitute definitive answers to the question as to the motivation role of curiosity, learning, philosophizing, experimenting, and so on. They are, at best, no more than partial answers.

This question is especially difficult because we know so little about the facts. Curiosity, exploration, desire for the facts, desire to know may certainly be observed easily enough. The fact that they often are pursued even at great cost to the individual's safety is an earnest of the partial character of our previous discussion. In addition, the writer must admit that, though he has sufficient clinical evidence to postulate the desire to know as a very strong drive in intelligent people, no data are available for unintelligent people. It may then be largely a function of relatively high intelligence. Rather tentatively, then, and largely in the hope of stimulating discussion and research, we shall postulate a basic desire to know, to be aware of reality, to get the facts, to satisfy curiosity, or as Wertheimer phrases it, to see rather than to be blind.

This postulation, however, is not enough. Even after we know, we are impelled to know more and more minutely and microscopically, on the one hand, and, on the other, more and more extensively in the direction of a world philosophy, religion, and so on. The facts that we acquire, if they are isolated or atomistic, inevitably get theorized about, and either analyzed or organized or both. This process has been phrased by some as the search for "meaning." We shall then postulate a desire to understand, to systematize, to organize, to analyze, to look for relations and meanings.

Once these desires are accepted for discussion, we see that they too form themselves into a small hierarchy in which the desire to know is prepotent over the desire to understand. All the characteristics of a hierarchy of prepotency that we have described above seem to hold for this one as well.

We must guard ourselves against the too-easy tendency to separate these desires from the basic needs we have discussed above, i.e., to make a sharp dichotomy between "cognitive" and "conative" needs. The desire to know and to understand are themselves conative, i.e.,

have a striving character, and are as much personality needs as the "basic needs" we have already discussed.[16]

Further characteristics of the basic needs

The degree of fixity of the hierarchy of basic needs

We have spoken so far as if this hierarchy were a fixed order but actually it is not nearly as rigid as we may have implied. It is true that most of the people with whom we have worked have seemed to have these basic needs in about the order that has been indicated. However, there have been a number of exceptions.

1. There are some people in whom, for instance, self-esteem seems to be more important than love. This most common reversal in the hierarchy is usually due to the development of the notion that the person who is most likely to be loved is a strong or powerful person, one who inspires respect or fear and who is self-confident or aggressive. Therefore, such people who lack love and seek it, may try hard to put on a front of aggressive, confident behavior. But essentially they seek high self-esteem and its behavior expressions more as a means-to-an-end than for its own sake; they seek self-assertion for the sake of love rather than for self-esteem itself.

2. There are other, apparently innately creative people in whom the drive to creativeness seems to be more important than any other counterdeterminant. Their creativeness might appear as self-actualization released not by basic satisfaction but in spite of lack of basic satisfaction.

3. In certain people the level of aspiration may be permanently deadened or lowered. That is to say, the less prepotent goals may simply be lost and may disappear forever, so that the person who has experienced life at a very low level, i.e., chronic unemployment, may continue to be satisfied for the rest of his life if only he can get enough food.

4. The so-called psychopathic personality is another example of permanent loss of the love needs. There are people who, according to the best data available,[17] have been starved for love in the earliest months of their lives and have simply lost forever the desire and the ability to give and to receive affection (as animals lose sucking or pecking reflexes that are not exercised soon enough after birth).

16. M. Wertheimer, unpublished lectures at the New School for Social Research.
17. D. M. Levy, "Primary Affect Hunger," *American Journal of Psychiatry* 94 (1937): 643–52.

5. Another cause of reversal of the hierarchy is that when a need has been satisfied for a long time, this need may be underevaluated. People who have never experienced chronic hunger are apt to underestimate its effects and to look upon food as a rather unimportant thing. If they are dominated by a higher need, this higher need will seem to be the most important of all. It then becomes possible, and indeed does actually happen, that they may, for the sake of this higher need, put themselves into the position of being deprived in a more basic need. We may expect that after a long-time deprivation of the more basic need there will be a tendency to reevaluate both needs so that the more prepotent need will actually become consciously prepotent for the individual who may have given it up very lightly. Thus, a man who has given up his job rather than lose his self-respect, and who then starves for six months or so, may be willing to take his job back even at the price of losing his self-respect.

6. Another partial explanation of *apparent* reversals is seen in the fact that we have been talking about the hierarchy of prepotency in terms of consciously felt wants or desires rather than of behavior. Looking at behavior itself may give us the wrong impression. What we have claimed is that the person will *want* the more basic of two needs when deprived in both. There is no necessary implication here that he will act upon his desires. Let us say again that there are many determinants of behavior other than needs and desires.

7. Perhaps more important than all these exceptions are the ones that involve ideals, high social standards, high values, and the like. With such values people become martyrs; they will give up everything for the sake of a particular ideal or value. These people may be understood, at least in part, by reference to one basic concept (or hypothesis) which may be called "increased frustration-tolerance through early gratification." People who have been satisfied in their basic needs throughout their lives, particularly in their earlier years, seem to develop exceptional power to withstand present or future thwarting of these needs simply because they have strong, healthy character structure as a result of basic satisfaction. They are the "strong" people who can easily weather disagreement or opposition, who can swim against the stream of public opinion, and who can stand up for the truth at great personal cost. It is just the ones who have loved and been well loved and who have had many deep friendships who can hold out against hatred, rejection, or persecution.

I say all this in spite of the fact that there is a certain amount of sheer habituation which is also involved in any full discussion of frustration tolerance. For instance, it is likely that those persons who have been

accustomed to relative starvation for a long time are partially enabled thereby to withstand food deprivation. What sort of balance must be made between these two tendencies, of habituation on the one hand, and of past satisfaction breeding present frustration tolerance on the other hand, remains to be worked out by further research. Meanwhile we may assume that they are both operative, side by side, since they do not contradict each other. In respect to this phenomenon of increased frustration tolerance, it seems probable that the most important gratifications come in the first two years of life. That is to say, people who have been made secure and strong in the earliest years tend to remain secure and strong thereafter in the face of whatever threatens.

Degrees of relative satisfaction

So far, our thoretical discussion may have given the impression that these five sets of needs are somehow in a stepwise, all-or-none relationship to one another. We have spoken in such terms as the following "If one need is satisfied, then another emerges." This statement might give the false impression that a need must be satisfied 100 percent before the next need emerges. In actual fact, most members of our society who are normal are partially satisfied in all their basic needs at the same time. A more realistic description of the hierarchy would be in terms of decreasing percentages of satisfaction as we go up the hierarchy of prepotency. For instance, if I may assign arbitrary figures for the sake of illustration, it is as if the average citizen is satisfied perhaps 85 percent in his physiological needs, 70 percent in his safety needs, 50 percent in his love needs, 40 percent in his self-esteem needs, and 10 percent in his self-actualization needs.

As for the concept of emergence of a new need after satisfaction of the prepotent need, this emergence is not a sudden, saltatory phenomenon but rather a gradual emergence by slow degrees from nothingness. For instance, if prepotent need A is satisfied only 10 percent then need B may not be visible at all. However, as this need A becomes satisfied 25 percent, need B may emerge 5 percent; as need A becomes satisfied 75 percent, need B may emerge 90 percent; and so on.

Unconscious character of needs

These needs are neither necessarily conscious nor unconscious. On the whole, however, in the average person, they are more often unconscious. It is not ncessary at this point to overhaul the tremendous mass of evidence which indicates the crucial importance of unconscious motivation. It would by now be expected, on a priori grounds alone, that unconscious motivations would on the whole be rather more im-

portant than the conscious motivations. What we have called the basic needs are very often largely unconscious although they may, with suitable techniques and with sophisticated people, become conscious.

The role of gratified needs

It has been pointed out above several times that our higher needs usually emerge only when more prepotent needs have been gratified. Thus gratification has an important role in motivation theory. Apart from this, however, needs cease to play an active determining or organizing role as soon as they are gratified.

What this means, for example, is that a basically satisfied person no longer has the needs for esteem, love, safety, and so on. The only sense in which he might be said to have them is in the almost metaphysical sense that a sated man has hunger or a filled bottle has emptiness. If we are interested in what *actually* motivates us and not in what has, will, or might motivate us, then a satisfied need is not a motivator. It must be considered for all practical purposes simply not to exist, to have disappeared. This point should be emphasized because it has been either overlooked or contradicted in every theory of motivation I know.[18] The perfectly healthy, normal, fortunate man has no sex needs or hunger needs, or needs for safety or for love or for prestige or for self-esteem, except in stray moments of quickly passing threat. If we were to say otherwise, we should also have to aver that every man had all the pathological reflexes, e.g., Babinski, etc., because if his nervous system were damaged, these would appear.

It is such considerations as these that suggest the bold postulation that a man who is thwarted in any of his basic needs may fairly be envisaged simply as a sick man. This is a fair parallel to our designation as "sick" of the man who lacks vitamins or minerals. Who is to say that a lack of love is less important than a lack of vitamins? Since we know the pathogenic effects of love starvation, who is to say that we are invoking value-questions in an unscientific or illegitmate way, any more than the physician does who diagnoses and treats pellagra or scurvy? If I were permitted this usage, I should then say simply that a healthy man is primarily motivated by his needs to develop and actualize his fullest potentialities and capacities. If a man has any other basic needs in any active, chronic sense, then he is simply an unhealthy man. He is as surely sick as if he had suddenly developed a strong salt-hunger or calcium hunger.[19]

18. Note that acceptance of this theory necessitates basic revision of the Freudian theory.

19. If we were to use the "sick" in this way, we should then also have to face squarely the relations of man to his society. One clear implication of our defini-

If this statement seems unusual or paradoxical, the reader may be assured that this is only one among many such paradoxes that will appear as we revise our ways of looking at man's deeper motivations. When we ask what man wants of life, we deal with his very essence.

Summary

1. There are at least five sets of goals which we may call basic needs. These are briefly physiological, safety, love, esteem, and self-actualization. In addition, we are motivated by the desire to achieve or maintain the various conditions upon which these basic satisfactions rest and by certain more intellectual desires.

2. These basic goals are related to one another, being arranged in a hierarchy of prepotency. This means that the most prepotent goal will monopolize consciousness and will tend of itself to organize the recruitment of the various capacities of the organism. The less prepotent needs are minimized, even forgotten or denied. But when a need is fairly well satisfied, the next prepotent ("higher") need emerges, in turn to dominate the conscious life and to serve as the center of organization of behavior, since gratified needs are not active motivators.

Thus man is a perpetually wanting animal. Ordinarily the satisfaction of these wants is not altogether mutually exclusive but only tends to be. The average member of our society is most often partially satisfied and partially unsatisfied in all of his wants. The hierarchy principle is usually empirically observed in terms of increasing percentages of nonsatisfaction as we go up the hierarchy. Reversals of the average order of the hierarchy are sometimes observed. Also it has been observed that an individual may permanently lose the higher wants in the hierarchy under special conditions. There are not only ordinarily multiple motivations for usual behavior but, in addition, many determinants other than motives.

3. Any thwarting or possibility of thwarting of these basic human goals, or danger to the defenses which protect them or to the conditions upon which they rest, is considered to be a psychological threat. With a few exceptions, all psychopathology may be partially traced to such threats. A basically thwarted man may actually be defined as a "sick" man.

tion would be that (1) since a man is to be called sick who is basically thwarted, and (2) since such basic thwarting is made possible ultimately only by forces outside the individual, the (3) sickness in the individual must come ultimately from a sickness in the society. The "good" or healthy society would then be defined as one that permitted man's highest purposes to emerge by satisfying all his prepotent basic needs.

4. It is such basic threats which bring about the general emergency reactions.

5. Certain other basic problems have not been dealt with because of limitations of space. Among these are (*a*) the problem of values in any definitive motivation theory, (*b*) the relation between appetites, desires, needs, and what is "good" for the organism, (*c*) the etiology of the basic needs and their possible derivation in early childhood, (*d*) redefinition of motivational concepts, i.e., drive, desire, wish, need, goal, (*e*) implication of our theory for hedonistic theory, (*f*) the nature of the uncompleted act, of success and failure, and of aspiration-level, (g) the role of association, habit, and conditioning, (*h*) relation to the theory of interpersonal relations, (*i*) implications for psychotherapy, (*j*) implication for theory of society, (*k*) the theory of selfishness, (*l*) the relation between needs and cultural patterns, (*m*) the relation between this theory and Allport's theory of functional autonomy. These as well as certain other less important questions must be considered as motivation theory attempts to become definitive.

Intrinsic and Extrinsic Motivation
Barry M. Staw

The study of motivation is not only a specialized research area within the field of psychology, but also an important pursuit for nearly everyone. People engage widely in the art of untangling the causes of human behavior and stand ready to predict the future actions of others. The scientific study of motivation is an organized effort to go beyond these native skills or common sense in explaining, predicting, and possibly controlling, individual behavior.

Typically, explantions of motivational phenomena attempt to answer such questions as, "Why does this worker spend so much time at his job?" or "Why did that student write a fifty-page term paper when everyone else stopped at ten?" To the layman these questions are often answered, or the behavior is "explained," by verbally linking a given action with a recognized goal or desirable outcome (Koch 1956; Lawler 1973). For example, if Person X performs a given act y, his behavior can be made intelligible to the lay person by completing the sentence. "X did y in order to . . ." Thus, acceptable commonsense explanations of a worker's behavior would include such reasons as "in order to increase his salary" or "to be promoted to a better job," while a student's high level of performance could be explained by such goals as "to receive the highest grade" or "to please others."

Commonsense theorizing, however, rarely constitutes a scientific explanation of behavior. It does not specify why a particular goal or end state was valued by an individual or why particular behaviors were chosen to reach the goal. As noted by Vroom (1964), the study of motivation by psychologists has been in large part directed toward filling in this missing empirical content of commonsense reasoning. The